

What is claimed is:

1. A multi-valve damper for an airflow duct, comprising:
 - a plug body having a proximal end and a distal end and adapted to separate a section of an airflow duct into at least two airflow sections;
 - at least two damper blades mounted on said distal end of said plug body, each of said damper blades controlling airflow in a respective airflow section.
2. A damper in accordance with claim 1, wherein:
 - said plug body bifurcates said duct section into two airflow sections.
3. A damper in accordance with claim 1, wherein:
 - said at least two airflow sections comprise equal sections.
4. A damper in accordance with claim 1, further comprising:
 - at least one airflow sensor in each of said airflow sections for controlling said damper blade in said respective airflow section.
5. A damper in accordance with claim 4, wherein:
 - said at least one sensor comprises at least one of a vortex type sensor, a pitot type sensor, or a thermal type sensor.
6. A damper in accordance with claim 4, further comprising:
 - an actuator mechanism responsive to said sensors for opening and closing said at least two damper blades simultaneously.
7. A damper in accordance with claim 4, further comprising:
 - an actuator mechanism associated with each damper blade, each of said actuator mechanisms being responsive to said at least one airflow sensor in a respective airflow section for opening and closing a respective damper blade independently of other damper blades.

8. A damper in accordance with claim 1, wherein:
said proximal end of said plug body has an aerodynamic shape which minimizes the disruption of airflow into said airflow sections.
9. A damper in accordance with claim 1, wherein:
said distal end of said plug body has a substantially flat shape.
10. A damper in accordance with claim 1, wherein:
said duct section is one of round, rectangular, or oval.
11. A damper in accordance with claim 1, wherein:
said damper blades are mounted such that each damper blade closes its respective airflow section when said damper blade is at an angle of approximately 45 degrees with respect to a longitudinal axis of said plug body.
12. A damper in accordance with claim 1, wherein:
said damper blades are mounted such that each damper blade rotates through an angle of approximately 45 degrees from fully closed to fully opened.
13. A damper in accordance with claim 1, wherein:
said damper blades are mounted such that each damper blade rotates through an angle of approximately 90 degrees from fully closed to fully opened.
14. A damper in accordance with claim 1, further comprising:
at least one electrically controlled actuator for opening and closing said damper blades.
15. A damper in accordance with claim 1, further comprising:

at least one pneumatically controlled actuator for opening and closing said damper blades.

16. A damper in accordance with claim 1, wherein:

said airflow duct is constructed of one of aluminum, galvanized steel, stainless steel, fiberglass, or plastic.

17. A damper in accordance with claim 1, wherein:

inner walls of the duct section are perforated.

18. A damper in accordance with claim 1, wherein:

inner walls of the duct section are lined with perforated sheet metal.

19. A damper in accordance with claim 18, wherein:

a fiberglass material is packed between the perforated sheet metal and the inner walls.

20. A damper in accordance with claim 1, wherein:

at least the proximal end of the plug body is perforated.

21. A damper in accordance with claim 1, wherein:

at least the proximal end of the plug body is constructed of perforated sheet metal; and
at least a perforated portion of the plug body is packed with a fiberglass material.

22. A method for controlling airflow in an airflow duct, comprising:

separating a section of an airflow duct into at least two airflow sections;

providing a damper blade at the end of each of said airflow sections for controlling
airflow in each airflow section.

23. A method in accordance with claim 22, wherein:

said duct section is bifurcated into two airflow sections.

24. A method in accordance with claim 22, wherein:
said at least two airflow sections comprise equal sections.
25. A method in accordance with claim 22, further comprising:
providing at least one airflow sensor in each of said airflow sections for controlling said damper blade in said respective airflow section.
26. A method in accordance with claim 25, wherein:
said at least one sensor comprises at least one of a vortex type sensor, a pitot type sensor, or a thermal type sensor.
27. A method in accordance with claim 25, further comprising:
providing an actuator mechanism responsive to said sensors for opening and closing said damper blades simultaneously.
28. A method in accordance with claim 25, further comprising:
providing an actuator mechanism associated with each damper blade, each of said actuator mechanisms being responsive to said at least one airflow sensor in a respective airflow section for opening and closing a respective damper blade independently of other damper blades.
29. A method in accordance with claim 22, wherein:
said duct section is separated by a plug body having an aerodynamically shaped proximal end which minimizes the disruption of airflow into said airflow sections.
30. A method in accordance with claim 22, wherein:
said duct section is separated by a plug body having a substantially flat shaped distal end.

31. A method in accordance with claim 22, wherein:

said duct section is one of round, rectangular, or oval.

32. A method in accordance with claim 22, wherein:

said damper blades are mounted such that each damper blade closes its respective airflow section when said damper blade is at an angle of approximately 45 degrees with respect to a longitudinal axis of said plug body.

33. A method in accordance with claim 22, wherein:

said damper blades are mounted such that each damper blade rotates through an angle of approximately 45 degrees from fully closed to fully opened.

34. A method in accordance with claim 22, wherein:

said damper blades are mounted such that each damper blade rotates through an angle of approximately 90 degrees from fully closed to fully opened.

35. A method in accordance with claim 22, further comprising:

providing at least one electrically controlled actuator for opening and closing said damper blades.

36. A method in accordance with claim 22, further comprising:

providing at least one pneumatically controlled actuator for opening and closing said damper blades.

37. A method in accordance with claim 22, wherein:

said airflow duct is constructed of one of aluminum, galvanized steel, stainless steel, fiberglass, or plastic.

38. A method in accordance with claim 22, wherein:

inner walls of the duct section are perforated.

39. A method in accordance with claim 22, wherein:
inner walls of the duct section are lined with perforated sheet metal.
40. A method in accordance with claim 39, further comprising:
packing a fiberglass material between the perforated sheet metal and the inner walls.
41. A method in accordance with claim 22, wherein:
at least the proximal end of the plug body is perforated.
42. A method in accordance with claim 22, wherein:
at least the proximal end of the plug body is constructed of perforated sheet metal; and
at least a perforated portion of the plug body is packed with a fiberglass material.